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AUTHOR Fulkerson, Jayne A.; Harrison, Patricia A.; Beebe, Timothy J.

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ABSTRACT

Alternative schools and area learning centers are individualized, nontraditional programs that lead to a high school diploma. To assess how students were doing in these schools and learning centers, the Minnesota Student Survey was administered in 1996 to 3,764 voluntary participants. The highlights of the results are reported here. To gain an accurate comparison with other youth, these alternative education adolescents were matched with children of the same gender and age who were randomly selected from regular public schools. Findings show that students in alternative education centers reported a number of problems. Rates of family substance abuse were two times higher for these adolescents than for students in regular schools. Furthermore, adolescents in alternative education centers were twice as likely as their regular school counterparts to have been physically abused, to have witnessed abuse within their families, or to have been sexually abused themselves. The results of the survey support the benefits of the alternative education centers. They also have implications for further curricula development and interventions with individual students. Five suggested improvements to services for adolescents are included. The findings are presented in five parts: youth, their families and their environments, which focuses on demographics, family relationships, violence and abuse; psychological distress, which addresses self-esteem and self-injurious behavior; sexual activity; school perceptions and behaviors; and antisocial and illegal behaviors, such as substance use and delinquent behavior. (RJM)

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1996 Minnesota Student Survey

Alternative Schools and Area Learning Centers



Minnesota Department
of Human Services

Minnesota Department
of Children, Families
and Learning

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EA 024338

Alternative Schools and Area Learning Centers

By

Jayne A. Fulkerson, M.A.
Patricia A. Harrison, Ph.D.
Timothy J. Beebe, Ph.D.



Minnesota Department of Human Services
Performance Measurement & Quality Improvement Division
444 Lafayette Road
St. Paul, MN 55155-3823

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MN Department of Human Services
Performance Measurement & Quality Improvement Division
444 Lafayette Road
St. Paul, MN 55155-3865
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We would like to recognize the special contributions made by a number of individuals to this report and the ongoing Minnesota Student Survey projects. We sincerely thank Barbara Yates of the Minnesota Department of Children, Families and Learning for her vision, direction, and support of the Minnesota Student Survey over the years. We are indebted to Dean Zumach of the Minnesota Department of Children, Families and Learning for his tirelessness and congeniality in the coordination of the sites for data collection. We also thank the program staff at participating sites for administering the survey and attending to all the procedural details requested of them. We appreciate the creativity and the attention to detail demonstrated by Mitzi Nelson from the Department of Human Services in her graphic design of this report. Michael Luxenberg and Matthew Christenson of Professional Data Analysts have provided prompt and thorough data base management and consultation that we gratefully appreciate. We would also like to thank Gene Johnson from the Department of Children, Families and Learning for his input about the structure and goals of alternative education centers. We are grateful to MaryKay Haas and Jim Colwell from the Department of Children, Families and Learning for their continued work and support on the administration of the Minnesota Student Survey. We also thank Anne Betzner of Professional Data Analysts for her helpful suggestions in response to an earlier draft of this report. Last, but not least, we extend our sincerest thanks to all of the adolescents who participated in the survey. We appreciate their honesty and patience in completing the long survey.

Participating Sites

Adult and Continuing Education, Maplewood	Cedar Alternative Center, Eagan
Albert Lea Area Learning Center	Center School, Minneapolis
Alternative Learning Center, Cottage Grove	Chisago Lakes Area Learning Center,
Anoka-Hennepin Alternative Program	Lindstrom
Austin Alternative Learning Center	City School-Southside, Minneapolis
Backus Alternative School, International Falls	Columbia Heights Alternative Program
Bagley Alternative	Crookston Area Learning Center
Bemidji Area Learning Center	Dakota County Area Learning Center,
Benson Area Learning Center	Rosemount
Bluff County Learning Options, Hokah	Detroit Lakes Area Learning Center
Brainerd Area Education Center	Duluth Area Learning Center
Carlton County Area Learning Center,	East Range Area Learning Center, Biwabik
Cloquet	Elk River Area Learning Center
Carver Scott Area Learning Center, Chaska	Faribault Alternative Evening High School
Cass Lake Area Learning Center	Fergus Falls Alternative Program
Continuing Education Center for Pregnant	Freshwater Area Learning Center, Staples
Teens - Parent-Infant Education (CEC-PIE)	Grand Rapids Area Learning Center
South, Richfield	Guadalupe Area Project, St. Paul
Continuing Education Center for Pregnant	Heart of the Earth Survival, Minneapolis
Teens - Parent-Infant Education (CEC-PIE)	Highview Alternative/Robbinsdale, New Hope
West, Minnetonka	Hopkins Alternative Program, Minnetonka

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Merriam Park Intensive Day Treatment (IDT),
St. Paul
Mid State Educational District, Little Falls
Minneapolis Area Learning Center
Coordinating Center
Minnesota Valley Area Learning Center,
Montevideo
Minnesota Valley Adult Diploma Program,
Burnsville
Moorhead Area Learning Center
Mora Alternative Program
Mounds View Adult Diploma Program,
New Brighton
Mounds View Area Learning Center,
Shoreview
North Branch Area Lab
Northfield Area Learning Center
Oak Grove Area Learning Center, Shoreview
Oak Land Area Learning Center, Cambridge
Owatonna Alternative School
Peers Enjoying a Sober Education (PEASE)
Academy, Minneapolis
Perham Alternative Learning Center
Pine City Area Learning Center
Project 70001 Work Achievement Values &
Education (WAVE) North, Golden Valley
Project 70001 Work Achievement Values &
Education (WAVE) South, Richfield
Project Re-Entry, Bloomington
Rambling River Alternative, Farmington
Range Area Alternative, Crosby

Ricori Alternative Program, Cold Spring
River Bend Alternative Program, New Ulm
Robbinsdale Adult Academic Program
Rochester Area Learning Center
Rosemount/Apple Valley Alternative School
Roseville Adult High School
Runestone Regional Learning, Alexandria
Senior High Options, St. Louis Park
South Hennepin Adult Programs in
Education (SHAPE), Richfield
Simley Alternative High School,
Inver Grove Heights
SOAR, Brooklyn Park
SOAR, Osseo
Sobriety High, Edina
South St. Paul Area Learning Center
Southwest Area Learning Center, Windom
St. Cloud Area Learning Center
St. Paul Area Learning Center
The Alternative Program (TAP), Plymouth
Tower View Opportunity, Red Wing
Westonka Alternative Program, Mound
White Bear Lake Area Learning Center
Willmar Area Learning Center
Winona Area Learning Center
Work Opportunity Center, Minneapolis
Wright Technical Center/Area Learning
Center, Buffalo
Zumbro Education District Alternative, Byron

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Executive summary

The alternative education centers appear to be a positive experience for many students who leave the regular school system and enroll in area learning centers or alternative schools. In a recent survey, these students were three times as likely as students in regular schools to state that they believe all their teachers are interested in them as individuals, and twice as likely to state that all teachers show respect for students. Their positive reactions to the school environment extended to their opinions of fellow students as well. Compared with regular school students they reported better student behavior and they also reported less threatening behavior between students of different races. Students in alternative education centers also perceived fewer serious problems confronting them in their school environment. For example, far fewer students in alternative education centers than students in regular schools reported that alcohol and drug use was a problem at their school (48% versus 67%).

These positive assessments of the alternative education center experience are especially meaningful in light of the reality that this student population includes many students considered to be at risk for a variety of problems, many who have had serious problems, and many who were not successful in the regular school environment. An especially encouraging finding is that 97% of the alternative education center students said that they plan to complete high school, with many planning to go on to postsecondary education.

This report highlights some of the findings that emerged when the Minnesota Student Survey was administered to 3,764 voluntary participants in alternative schools and area learning centers in 1996. In order to get an accurate comparison with other youth, these adolescents were matched with adolescents of the same gender and age randomly selected from the regular public school student population.

Alternative schools and area learning centers, referred to in this report as alternative education centers, are individualized, nontraditional programs that lead to a high school diploma. The centers are designed for students who are behind in school work, have dropped out of regular public schools, need assistance with personal or social problems, or would like a more flexible educational environment. Due in part to the cultural sensitivity of many of these programs, adolescents of color comprise a larger proportion of the alternative education center population than the regular public school population, particularly American Indian youth.

Students in alternative education centers reported a number of problems. Rates of family substance abuse were 2 times higher for adolescents in alternative education centers than for adolescents in regular schools. Adolescents in alternative education centers were twice as likely as adolescents in regular schools to have been physically abused, to have witnessed abuse within their families, or to have been sexually abused.

Twice as many students in alternative education centers as students in regular schools reported a suicide attempt. In fact, 41% of the females and 23% of the males in alternative education centers said that they had tried to kill themselves at some point in their lives.

Rates of sexual activity were very high among the alternative education center population with 90% of females and 83% of males reporting that they had had sexual intercourse. These students also initiated sexual activity at a younger age than their counterparts in

regular schools and were less likely to protect themselves from pregnancy and sexually transmitted diseases.

Antisocial behaviors such as physical assaults, shoplifting, and vandalism were more common among adolescents in alternative education centers than adolescents in regular schools. Reports of gang involvement and carrying weapons on school property were also higher for them than adolescents in regular schools.

Substance use was extremely common among the alternative education center population. Adolescents in alternative education centers were 5 times more likely than regular school students to smoke at least a pack of cigarettes a day and 2 to 7 times more likely to use drugs other than alcohol. Students in alternative education centers were 5 times more likely than students in regular schools to use at least 3 drugs.

The higher rates of pregnancy, substance use, and physical and sexual abuse among adolescents in alternative education centers than among adolescents in regular schools are consistent with the eligibility criteria for these centers and highlight the special needs of these students.

The results of the survey support the benefits of the alternative education centers. They also have implications for further curricula development and interventions with individual students. Clearly, earlier detection and effective interventions for children and families traumatized by physical and sexual abuse are essential. Improved access to professional assessments and services for all families also would help to reduce the likelihood of serious behavioral problems and poor school performance among youth. Collaborative efforts now underway between schools, county social service agencies, and community mental health centers, such as targeted service programs, are an important step in this direction.

Survey results also suggest improvements to services for adolescents in alternative education centers which may reduce substance use problems, pregnancy, and psychological distress. Specific recommendations include:

- Alternative education centers should have an established referral network for assessment and treatment of problems such as substance abuse and physical and sexual abuse.
- Training should be available for alternative education center personnel to ensure that they are able to identify mental health and chemical health problems in their students. Referrals for services should be available for students in need.
- Collaborative efforts between alternative education centers, county social service agencies, mental health centers, and substance abuse treatment centers should be expanded to best serve students' needs.
- Programs serving adolescents in alternative education centers should capitalize on the positive relations between teachers and students.
- Curriculum to address responsible sexual behavior should be developed or improved.

Enrollment in alternative schools and area learning centers

Alternative schools and area learning centers are individualized, nontraditional programs that lead to a high school diploma. The purpose of these programs is to provide options so that all youth succeed in school. These academic centers are designed especially for students who are behind in their work, or who have dropped out but want to complete their education. Other students choose alternative schools or area learning centers because of their flexible hours and programs, because they prefer the nontraditional environment, or because they need assistance with personal or social problems. Some alternative schools and all area learning centers offer trade and vocational skills training, school-to-work transition skill development, applied learning, youth services, and work experience. Although alternative schools and area learning centers are not officially designated to serve a particular culture or ethnic group, some offer programs which focus on cultural issues and therefore attract students from a particular group.

A student is eligible to participate in an area learning center by meeting any of the following criteria: performs substantially below the performance level for students of the same age; is at least one year behind in satisfactorily completing coursework or obtaining credits for graduation; is pregnant or is a parent; has been assessed as chemically dependent; has been expelled; has been referred by a school district; is a victim of physical or sexual abuse; has experienced mental health problems; has experienced homelessness within the six months prior to requesting a transfer to an eligible program; or speaks English as a second language or has limited English proficiency.

Survey administration

The Minnesota Student Survey was designed to elicit important information about adolescents from adolescents themselves. The survey included a variety of questions about their backgrounds, families, and schools, as well as about their feelings and behaviors. The Minnesota Student Survey was administered to public school students in 1989, 1992, and 1995, and to adolescents in special settings such as alternative schools and area learning centers in 1991 and 1996. Participation in the survey was voluntary and all surveys were completed anonymously.

In 1996, 86 of 104 (83%) alternative schools and area learning centers participated in the survey. Approximately half of the centers are located in the Minneapolis-St. Paul metropolitan area; the others are located throughout the state.

More alternative schools and area learning centers and more adolescents participated in the Minnesota Student Survey in 1996 than in 1991. In 1996, 86 centers with 3,968 students participated compared to 74 centers with 2,620 students in 1991.¹ The larger number of participants in 1996 is due in part to the growth in the number of alternative schools and area learning centers in the past few years.

Some students did not participate in the survey because the data collection time frame did not coincide with their flexible schedules at the alternative education centers. Two percent of students refused to participate in the survey and an additional 2.5% of surveys were excluded because of inconsistent responses or failure to complete essential items such as gender or age. The findings described in this report are based on 3,764 adolescents.

Matching adolescents in alternative schools and area learning centers with regular school students

This report compares the 1996 survey responses of adolescents in alternative schools and area learning centers with adolescents in regular public schools. Each adolescent in the alternative school and area learning center survey population was randomly matched by age and gender with a regular public school student from the 1995 student survey population. This matching procedure ensures that differences found between the two groups are not the result of age or gender differences.

One difference between the two adolescent survey groups remains, however. The alternative school and area learning center adolescents took the survey a year later than the regular school students. Therefore, it is possible that some differences between the two groups might result from the time difference. For example, since drug use increased among students in Minnesota between 1992 and 1995,² a higher rate of drug use among adolescents in alternative schools and area learning centers than among regular school students could conceivably be the difference between two different points in time. While this possibility cannot be dismissed, most of the differences found were much too large to be attributed to the time that elapsed between the survey administrations. Furthermore, for many adolescent behaviors and environmental events, changes over time were almost negligible.

The title of the combined alternative school and area learning center populations has been shortened to "alternative education centers" in this report for ease in reading the text, tables, and graphs. Also for ease in presentation, percentages used in this report have been rounded to whole numbers. For a few tables and pie charts, this results in a total of 99% or 101% instead of 100%. The terms "adolescents" and "students" are used interchangeably to refer to the 12- to 20-year-old survey participants described in this report.

Youth, their families and their environments

Population description

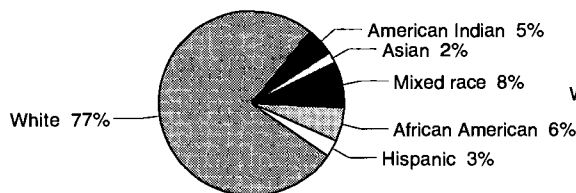
Almost equal numbers of males and females were enrolled in alternative education settings. Among the 12 to 20 age group included in this report, one-third were legally adults (18 to 20), over half were 16 and 17, and only 16% were 15 or younger.

Adolescents of color comprise a larger proportion of the alternative education system than the regular public school system, a finding true for all minority groups except Asian Americans. Alternative education enrollment rates were 5 times higher than would be expected based on general population figures for American Indians, and about 1½ to 2½ times higher for Hispanics, African Americans, and for adolescents of biracial or multiracial heritage.

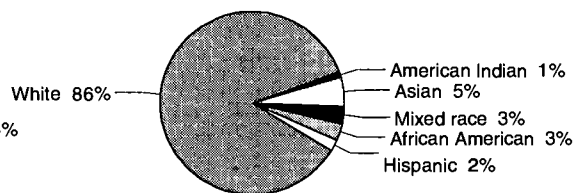
Demographics of the alternative education center survey population

	Number	%
Sex		
Females	1906	51
Males	1858	49
Age		
12-13	31	<1
14	151	4
15	401	11
16	781	21
17	1153	31
18-20	1247	33

Racial/ethnic background



Alternative education centers



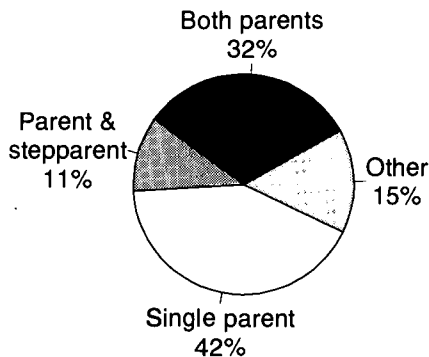
Regular schools

Family composition/relationships

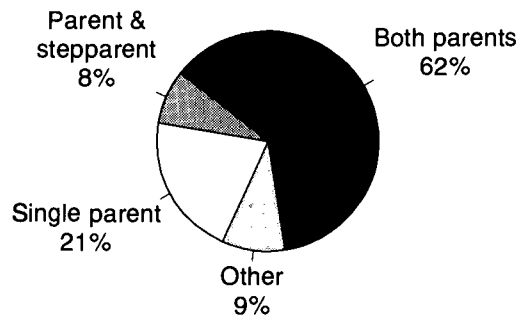
Adolescents in alternative education centers were much less likely to come from two-parent homes than adolescents in the regular school population. In fact, students in the regular school population were 2 times more likely to be living with both biological or adoptive parents than students in alternative education centers. Students in alternative education centers were twice as likely as students in regular schools to live with single parents. More of the students in alternative education centers had parents who never married, who divorced, or who were deceased.

Despite the large differences in family composition between students in alternative education centers and students in regular schools, differences in perceptions about interpersonal family relationships were modest. A very large proportion of both groups of adolescents believed that their parents care about them "quite a bit" or "very much," with the percentage higher for the regular school population. Regular school students also were more likely than alternative education center students to give very positive responses to the questions about whether their families cared about their feelings, understood them, respected their privacy, or had fun together.

Living situation



Alternative education centers



Regular schools

Perception of family

How much do you feel... (Quite a bit or very much)	Alternative education centers	Regular schools
	%	%
Your parents care about you?	80	88
Your family cares about your feelings?	60	69
Your family understands you?	37	46
Your family respects your privacy?	48	55
Your family has lots of fun together?	31	42

Parent-adolescent communication was comparable between adolescents in alternative education centers and those in regular schools. About an equal number of adolescents in alternative education centers and in regular schools said they can talk about their problems with their mothers and their fathers "most of the time."

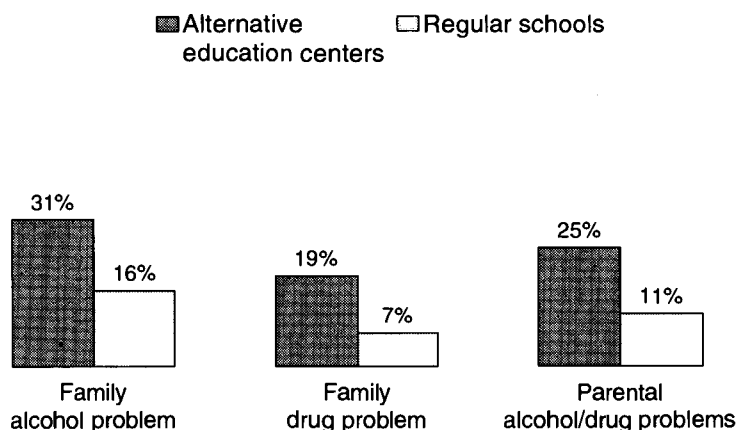
Adolescents were also asked about rules in their household. When parents had rules, more adolescents in alternative education centers than in regular schools thought the rules were fair, but slightly fewer felt that their parents followed through with consequences when the rules were broken. However, 30% of adolescents in alternative education centers responded that their parents did not have many rules compared to 17% of adolescents in regular schools. This higher level of permissiveness was associated with antisocial behavior among these adolescents.

Family alcohol/drug problems

Adolescents in alternative education centers were 2 times more likely than regular school students to report alcohol and drug problems in their families. They were asked, "Has alcohol use by any family member repeatedly caused family, health, job, or legal problems?" followed by a similar question for drug use. When the responses for alcohol and drug problems were combined, but limited to adolescent assessment of their parents, the difference was also notable: students in alternative education centers were more than 2 times more likely than regular school students to report that a parent had an alcohol or drug problem.

In the alternative education center population, parental substance abuse was associated with greater physical and sexual abuse, severe emotional health and self-esteem problems, suicide attempts, and substance abuse problems in the adolescent.

Family alcohol and other drug problems



Family violence

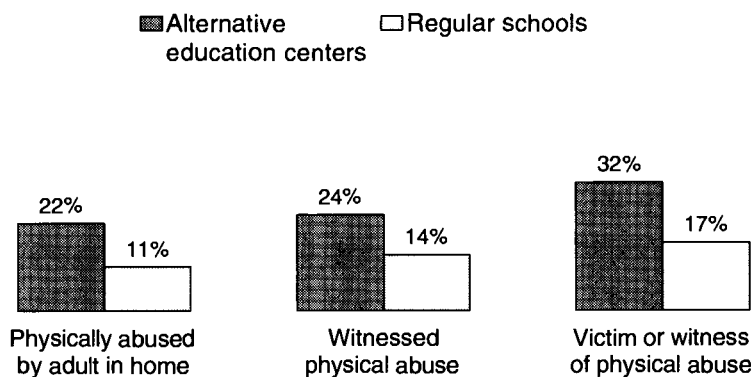
The survey included two questions about family violence: "Has any adult in your household ever hit you so hard or so often that you had marks or were afraid of that person?" and "Has anyone in your family ever hit anyone else in the family so hard or so often that they had marks or were afraid of that person?" A yes response to the first question was considered physical abuse and a yes response to the second question was considered witnessing physical abuse.

Students in alternative education centers were twice as likely as regular school students to have been physically abused in the

home, and almost twice as likely to have witnessed other family members being physically abused. Considering both aspects of family violence means that one-third of adolescents in alternative education centers have either been physically abused, witnessed such abuse, or both.

Family violence was associated with severe emotional health and self-esteem problems among adolescents in alternative education centers, as well as with an increased likelihood of sexual abuse by a non-family member, date rape and violence, suicide attempts, severe antisocial problems, and multiple substance use.

Family violence



Sexual abuse

Students in alternative education centers were much more likely to report histories of sexual abuse than students in regular schools. The survey asked, "Has any older or stronger member of your family ever touched you sexually or had you touch them sexually?" and "Has any adult or older person outside the family ever touched you sexually against your wishes or forced you to touch them sexually?" Intrafamilial (within the family) sexual abuse was about 1½ times more likely to be reported by female students in alternative education centers than by female students in regular schools and 2 times more likely to be reported by male students in alternative education centers than by male students in regular schools. Extrafamilial (outside the family) sexual abuse was approximately 2 times more likely to be reported by

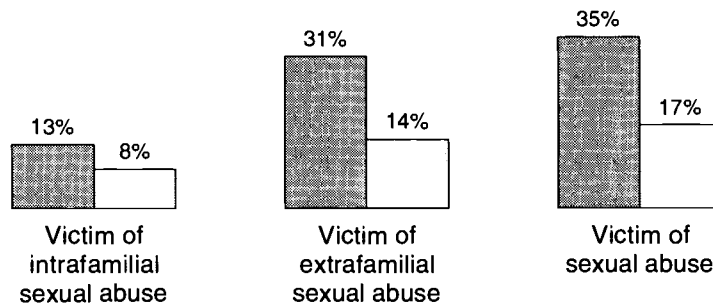
females in alternative education centers and 1½ times more likely to be reported by males in alternative education centers than by their regular school counterparts. Considering both types of sexual abuse reveals that over one-third of the females in alternative education centers had experienced sexual abuse; sexual abuse was much less common among males in alternative education centers.

A history of sexual abuse was associated with suicide attempts, self-esteem and emotional health problems as well as with an increased risk for date rape and violence, physical abuse, and sexual activity among adolescents in alternative education centers. In addition, many victims of sexual abuse in the alternative education center population did not feel that their families cared about them.

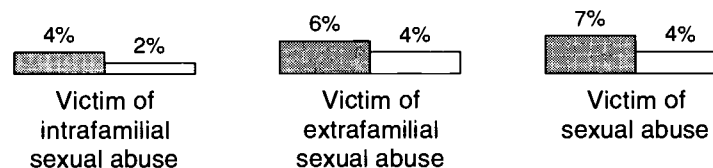
Sexual abuse

■ Alternative education centers □ Regular schools

FEMALES



MALES

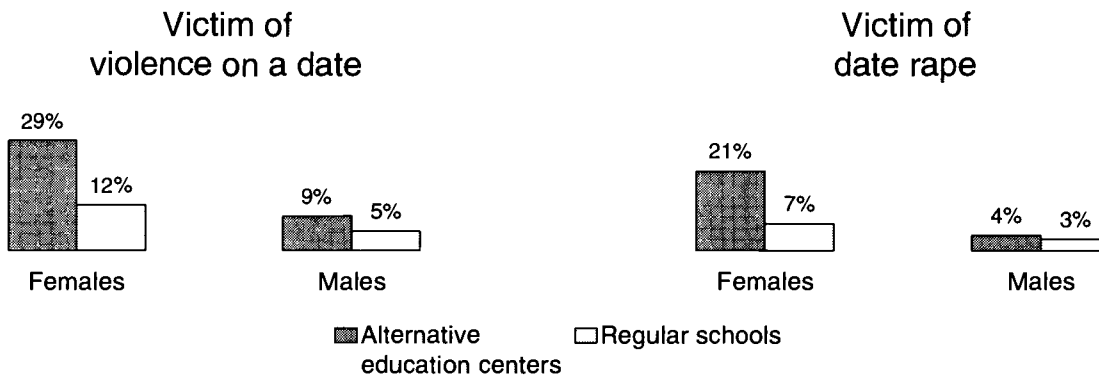


Date violence and rape

Survey questions asked about date violence and date rape (which are not included in the definitions of physical and sexual abuse used in this report). The questions asked, "Have you ever been the victim of violence on a date?" and "Have you ever been the victim of date rape?" Females in alternative education centers were much more likely than females in regular schools to report date violence (2½ times higher) and date rape (3 times higher). Males in alternative education centers were almost twice as likely as males in regular schools to report being a

victim of date violence. Being a victim of date rape was reported by only a small percentage of both male populations, however.

Both date violence and rape were reported much more frequently by females than males in alternative education centers. Many individuals who reported date violence also reported date rape. Date violence and date rape were often associated with severe emotional health and self-esteem problems, suicide attempts, sexual activity, and multiple drug use among the adolescents in alternative education centers.



Multiple victimizations

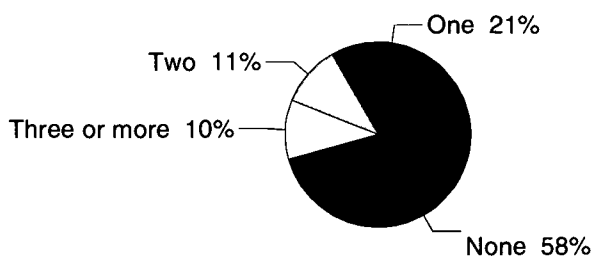
To examine differences in multiple experiences of abuse, five measures of victimization were considered: intrafamilial sexual abuse, extrafamilial sexual abuse, intrafamilial physical abuse, date violence, and date rape. The proportions that reported two or more of these experiences included 21% of the alternative education center students compared with 10% of the regular school students.

Differences between the two survey populations were even more apparent when the threshold was three victimization experiences and genders were examined separately. While this high level of victimization was reported by only 3% of males in alternative education centers and 2% of males in regular schools, 17% of females in alternative education centers had been victimized repeatedly compared with 5% of females in regular schools.

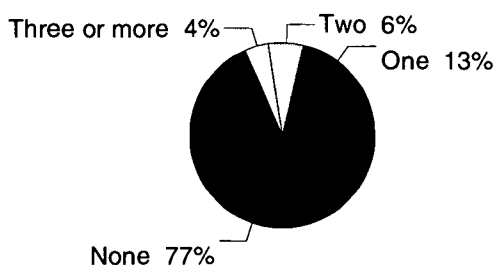
Further analyses showed that a history of physical abuse within the home was associated with a higher risk of date violence and date rape for both females and males. A history of sexual abuse within or outside the home also was associated with a higher risk of date violence and rape. These findings indicate that childhood abuse greatly increases the vulnerability of adolescents to repeated victimization.

Adolescents who were victims of multiple abusive experiences were very vulnerable to a host of other problems. These individuals were more likely than nonvictims to have severe self-esteem and emotional health problems, to have attempted suicide, to be multiple drug users, to have a parent with a substance abuse problem, and to feel that their family does not care about them. These associations increased with the number of victimization experiences so that adolescents who were physically and sexually abused were more likely to have these problems than individuals who experienced only one of these traumatic events.

Victimization experiences



Alternative education centers



Regular schools

Low self-esteem

For some measures of low self-esteem, differences between adolescents in alternative education centers and adolescents in regular schools were negligible. Adolescents in alternative education centers were about as likely as their counterparts in regular schools to believe they are able to do things as well as their peers and to think that they are no good; however, they were somewhat less likely to be satisfied with themselves, and to usually feel good about themselves. They were more likely to feel that they can't do anything right, to believe that they don't have much to be proud of, and to feel that their lives are not very useful than adolescents in regular schools. Despite the differences, only a fairly small minority of either population had

generally negative opinions about themselves.

Even though only a small number of adolescents in alternative education centers had severe self-esteem problems, these individuals were very likely to have been victims of physical or sexual abuse, date rape or date violence, or to have attempted suicide. Not surprisingly, these individuals tended to report emotional health problems as well. They were more likely than adolescents with higher self-esteem to feel that their family did not care about them and to have a parent with an alcohol or drug problem. Also, perhaps in an attempt to express their frustration, these adolescents were likely to have antisocial problems as well.

Low self-esteem	Alternative education centers %	Regular schools %
I am able to do things as well as most other people (Disagree)	10	9
I usually feel good about myself (Disagree)	20	15
On the whole, I'm satisfied with myself (Disagree)	21	15
I feel like I can't do anything right (Agree)	23	20
I feel I do not have much to be proud of (Agree)	29	20
I feel that my life is not very useful (Agree)	24	18
Sometimes I think that I am no good (Agree)	33	32

Emotional distress

Differences between adolescents in alternative education centers and adolescents in regular schools with respect to measures of emotional distress were modest. The survey asked a variety of questions about mood states for the previous 30-day period. Adolescents in alternative education centers were slightly more likely than their counterparts in regular schools to report bad moods, pervasive feelings of sadness, to be discouraged or hopeless, to be nervous, worried, or up-

set, to be dissatisfied with their personal lives, and to feel under great stress.

Students in alternative education centers with severe emotional health problems were more likely than other students to have been sexually or physically abused, victimized by a date, have a parent with a substance problem, and feel that their family does not care about them. It is apparent that sexual exploitation has a profound impact on emotional well-being.

Emotional distress	Alternative education centers %	Regular schools %
During the past 30 days...		
How has your mood been? (Bad or very bad)	8	6
Have you felt sad? (All or most of the time)	21	15
Have you felt so discouraged or hopeless that you wondered if anything was worthwhile? (Extremely or quite a bit)	21	16
Have you felt nervous, worried, or upset? (All or most of the time)	23	19
Have you felt satisfied with your personal life? (Somewhat or very dissatisfied)	28	23
Have you felt you were under any stress or pressure? (Quite a bit or almost more than I could take)	45	41

Suicidal behavior and self-injury

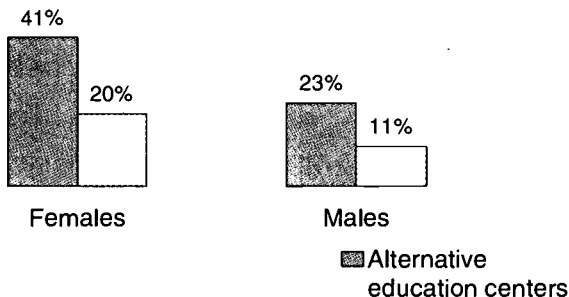
Slightly more adolescents in alternative education centers reported suicidal thoughts in the previous month than adolescents in regular schools (29% versus 25%). The difference in lifetime suicide attempts, however, was much greater than for recent suicidal ideation. Both females and males in the alternative education center population were 2 times more likely than their regular school counterparts to report that they had tried to kill themselves. In fact, two out of five females and almost one-fourth of the males in alternative education centers said they had attempted suicide.

Adolescents were also asked whether, during the previous 12 months, they had ever

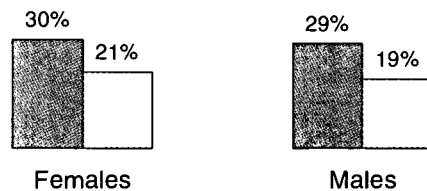
hurt themselves on purpose (such as by cutting or burning themselves). Students in alternative education centers were about 1½ times more likely than students in regular schools to report deliberate self-injury.

The relatively high rates of suicide attempts and self-injury observed among adolescents in the alternative education center population are related to their increased rates of physical and sexual abuse. Not surprisingly, adolescents who reported self-injurious behaviors also had significant self-esteem and emotional health problems, and felt that their family did not care about them.

Suicide attempts



Deliberate self-injury in past 12 months



Sexual activity

Adolescents in alternative education centers were much more likely than their counterparts in regular schools to have had sexual intercourse, and the difference was more pronounced for females. Ninety percent of females and over 80% of males in alternative education centers said they had had sexual intercourse. In contrast, fewer than half of the females and males in regular schools reported having had sexual intercourse.

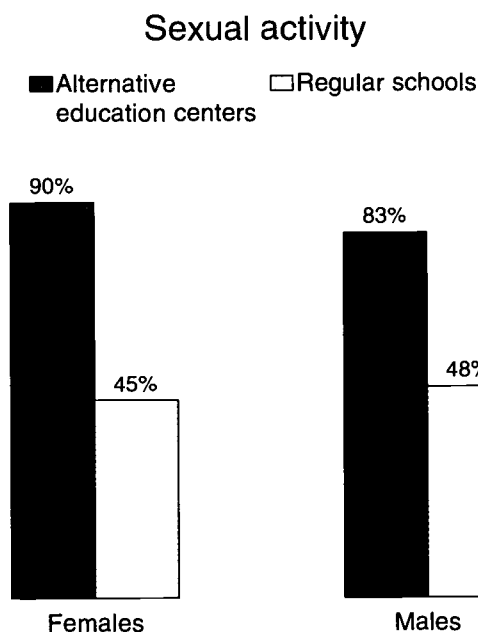
Students in alternative education centers were more likely to have started sexual activity at a younger age, with 55% of sexually active adolescents in alternative education centers saying that their first experience had occurred by age 14 compared with 31% of sexually active adolescents in regular schools.

With respect to both the high rates of sexual activity and the early age of initiation into sex among adolescents in alternative education centers, it is important to remember that such sexual activity may not have been voluntary. It is possible that, for many of the female adolescents, their first sexual experience was coerced since one-third of them said they had

been sexually abused and one-fifth said they had been raped by a date.

Sexually active adolescents in alternative education centers also were less likely than their counterparts in regular schools to report using protection against pregnancy and/or sexually transmitted diseases the last time they had sexual intercourse. Condoms were the most commonly reported method of protection, used by 51% of the sexually active adolescents in alternative education centers compared with 63% of the sexually active adolescents in regular schools. Birth control pills (alone or in combination with condoms) were used by an equal percentage of the sexually active adolescents in both survey populations.

The proportion of females who have been pregnant was 6 times higher in the alternative education centers than in regular schools. Forty percent of females in alternative education centers have been pregnant compared with 7% of females in regular schools. Proportionally more males in alternative education centers than in regular schools reported having gotten a sexual partner pregnant (18% compared with 5%).



Academic difficulties or other problems may have been the impetus for enrollment in alternative education centers, but whatever the reason for enrollment, the change appears to be a positive one for many alternative education center students. They were three times as likely as students in regular schools to state that they believe all their teachers are interested in them as individuals, and twice as likely to state that all teachers show respect for students.

Positive reactions to the school environment extended to their opinions of fellow students as well. Alternative education center students were as likely as regular school students to say that most of their peers were friendly, and they reported better student behavior in hallways and lunchrooms. They also reported less threatening behavior between students of different races.

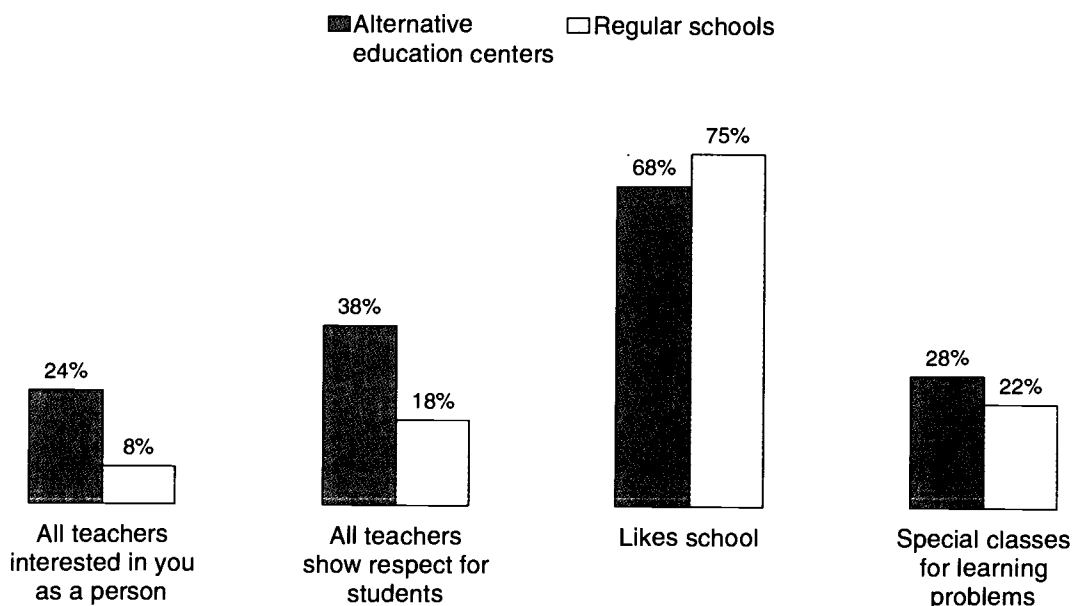
Students in alternative education centers also perceived fewer serious problems confronting them in their school environment. Far fewer students in alternative education centers than students in regular schools reported that alcohol and drug use was a problem at their school (48% versus 67%), and slightly fewer reported that illegal gang activity was

a problem at their school (18% versus 21%). Alternative education center students were just as likely to feel safe at school as regular school students.

These positive assessments of the alternative education center experience are especially meaningful in light of the reality that this student population includes many students considered to be at risk for a variety of problems, many who have had serious problems, and many who were not successful in the regular school environment. An especially encouraging finding is that 97% of the alternative education center students said that they plan to complete high school, with many planning to go on to postsecondary education.

Alternative education center students were somewhat less likely than regular school students to say that they like school, and more acknowledged that they had been in special classes for learning problems. However, these differences were small, suggesting that academic difficulties may be less important than other factors in differentiating alternative education center students from regular school students.

School factors



Delinquent behavior

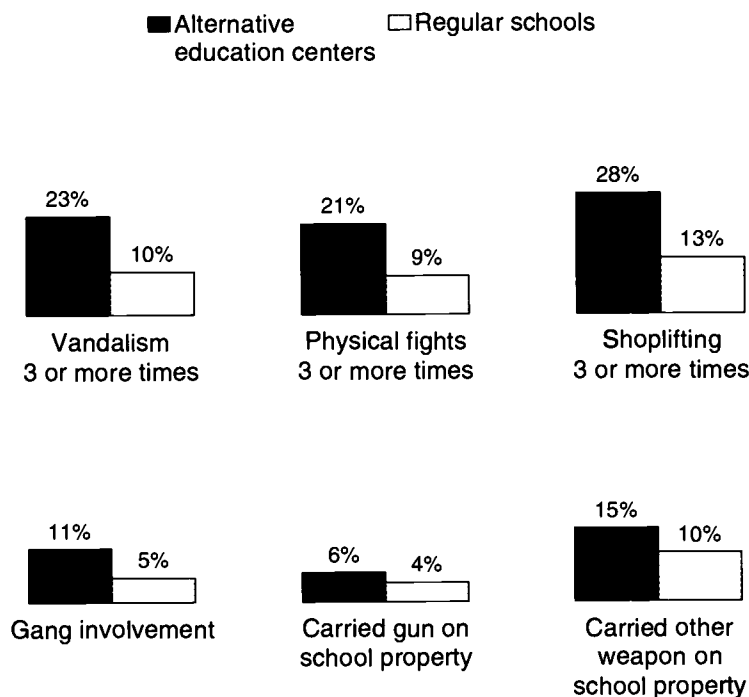
Adolescents in alternative education centers were more likely than their counterparts in regular schools to report antisocial behaviors during the previous 12 months. Acts of vandalism, hitting or beating someone up, and shoplifting at least 3 times in the previous year were more than 2 times higher among adolescents in alternative education centers than among adolescents in regular schools. Adolescents in alternative education centers also were more likely to say that they get a “kick” out of doing dangerous things than adolescents in regular schools (37% versus 27%).

Even more dangerous indicators distinguished the two groups of adolescents. Adolescents in alternative education centers were twice as likely as adolescents in regular schools to report spending time in a gang, and slightly more likely to say that they have carried a gun or other weapon on school

property. Whereas males in alternative education centers were more likely to carry guns and other weapons than females in alternative education centers, the gender difference was much greater for guns than other weapons. It is notable that carrying weapons to school was fairly common for males in the alternative education center population (11% had carried guns and 21% had carried other weapons). Also, males were more likely to be involved in a gang themselves whereas females were more likely to have friends in a gang.

The high rates of antisocial behavior reported by adolescents in alternative education centers were associated with their reports of family dysfunction, severe emotional and self-esteem problems, sexual activity, and multiple drug use. Antisocial behaviors were strongly related to the use of three or more drugs 10 or more times in the past year.

Delinquent behaviors in past 12 months



Recent trends in substance use

Substance use among adolescents is of heightened interest recently because of increases in the use of cigarettes, marijuana, LSD, and other drugs reported in a variety of national studies.^{3,4} Overall, the trends in Minnesota have mirrored those reported nationally, as shown in the comparison of Minnesota Student Survey results from 1989, 1992, and 1995.²

Although the focus of this report is the comparison between Minnesota students in alternative education centers and Minnesota students in regular schools, the recent national and state trends provide a helpful context for evaluating the magnitude of the differences found between these groups of young people.

The national prevalence of cigarette smoking has steadily increased since 1992 among adolescents of all ages.⁵ Minnesota smoking rates among adolescents have also increased and are actually higher than national rates.

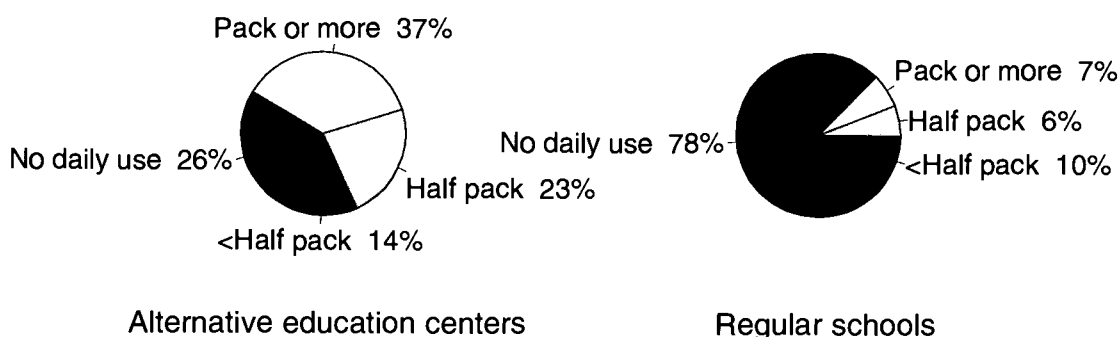
Nationally, alcohol use among adolescents declined from the 1980s through 1993 and then leveled off.³ In Minnesota, the declines in alcohol use continued through 1995 and

the Minnesota rate of alcohol use among adolescents was lower than the national rate. Trends for marijuana were markedly different, however. Marijuana use increased dramatically between 1992 and 1995 both nationally³ and in Minnesota,² but the state rates remained lower than the national rates. National surveys have also shown increases in other drugs, such as LSD and cocaine.³ Even with the recent increases, the overall prevalence rates for drugs other than marijuana remained relatively low in 1995. All drug use rates were well below peak levels seen in the late 1970s and early 1980s. Minnesota adolescent drug use rates were lower than national rates in 1995 for inhalants, LSD and other hallucinogens, cocaine, and opiates, but higher for amphetamines.²

Cigarette use

Adolescents in alternative education centers were much more likely to smoke cigarettes on a daily basis than adolescents in regular schools (74% versus 22%). The difference between the two groups of adolescents was even more pronounced for heavy smoking (at least a pack a day). Adolescents in alternative education centers were 5 times more likely to smoke heavily than adolescents in regular schools.

Daily cigarette use in past 30 days



Alcohol and drug use prevalence

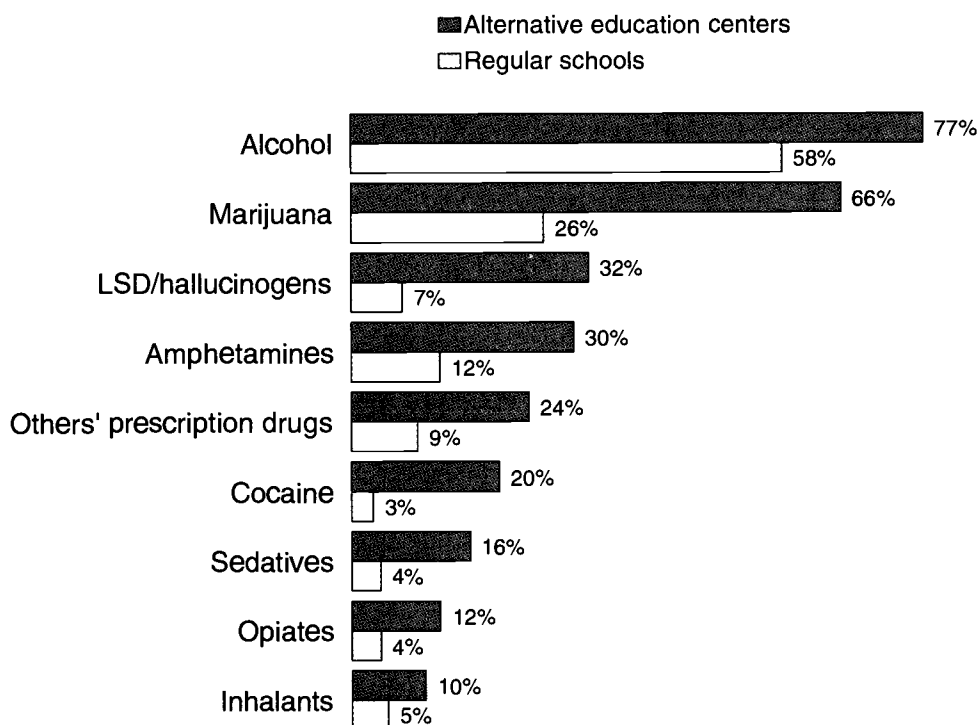
Adolescents in alternative education centers were much more likely than adolescents in regular schools to report the use of every substance inquired about in the survey, and they also were more likely to initiate substance use at a much earlier age. Alcohol and marijuana were the two most commonly used substances by adolescents in both groups, followed by LSD and other hallucinogens, amphetamines, and other people's prescription drugs. Inhalants, opiates, and sedatives were the least commonly used drugs by adolescents in alternative education centers whereas cocaine was the least commonly used drug by adolescents in regular schools.

Examining reports of use during the previous 12 months revealed that the proportional differences between alternative education center and regular school students were small-

est for alcohol. For all other substances, the differences in the proportions of users between the groups were much larger. Compared with adolescents in regular schools, adolescents in alternative education centers were 2 times more likely to use inhalants, 2½ times more likely to use marijuana, amphetamines, and others' prescription drugs, 3 times more likely to use opiates, 4 times more likely to use sedatives, 4½ times more likely to use LSD or other hallucinogens, and almost 7 times more likely to use cocaine.

The higher rates of substance use prevalence reported by adolescents in alternative education centers are associated with higher levels of other antisocial activity, being a victim of violence, emotional health and self-esteem problems, sexual activity, suicide attempts, and parental substance use problems.

Substance use prevalence in past 12 months



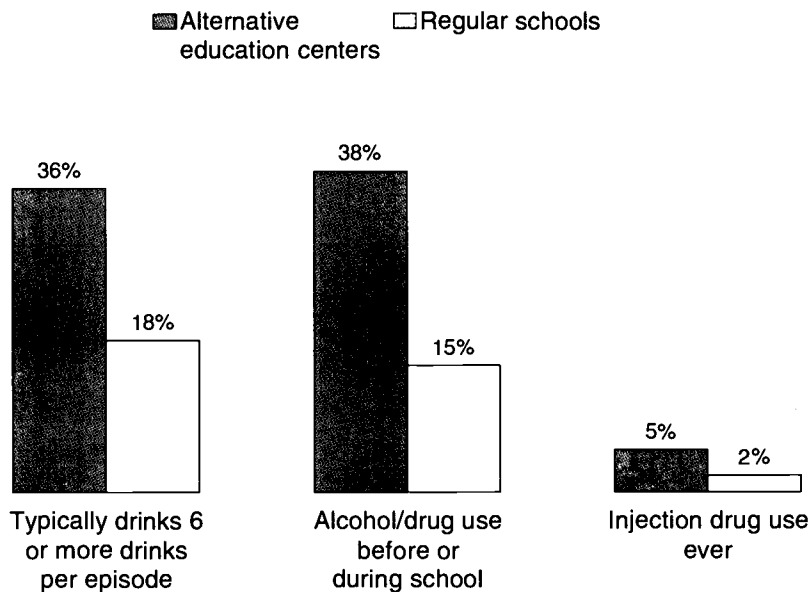
High-risk substance use

In addition to higher overall substance use, adolescents in alternative education centers engaged in more dangerous drinking and drug use behaviors than their regular school counterparts. They were 2 times more likely to drink at least six drinks when they drank, 2½ times more likely to use alcohol or drugs before or during school, and 2½ times more likely to have injected drugs, a very risky behavior, especially in light of possible HIV transmission.

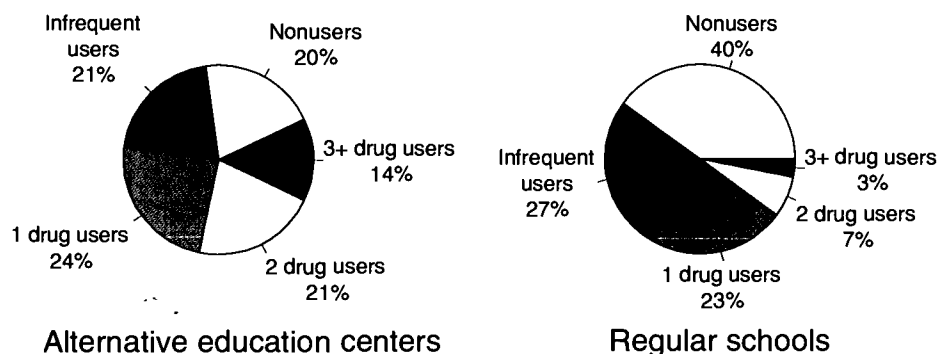
To illustrate differences in the use of multiple drugs, a hierarchy of substance use was created based on use in the past 12 months.

Adolescents who had not used any substances in the past 12 months were classified as nonusers. Adolescents who did not use any drug more than 9 times were classified as infrequent users. Those who used only one substance 10 or more times were classified as 1-drug users, and those who used two substances 10 or more times each were classified as 2-drug users. The most severe pattern was the use of at least three drugs 10 or more times each; adolescents with this pattern were classified as 3-or-more-drug users. Adolescents in alternative education centers were 3 times more likely than adolescents in regular schools to be 2-drug users and almost 5 times more likely to be 3-or-more-drug-users.

High-risk substance use behaviors



Multiple substance use in past 12 months



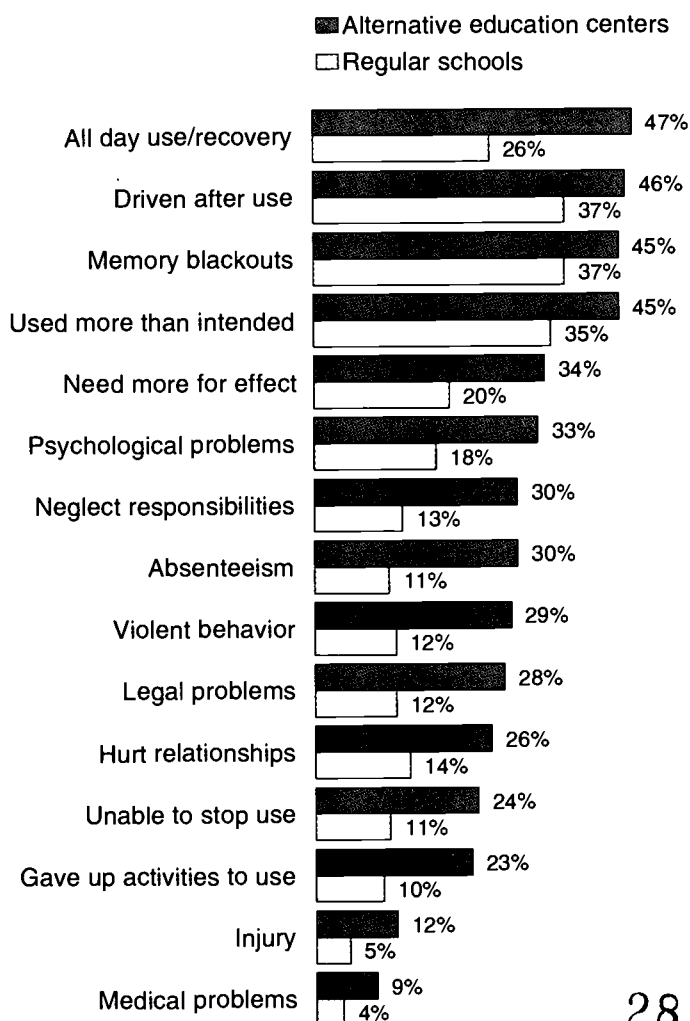
Consequences of substance use

Consistent with their higher levels of substance use, adolescents in alternative education centers also reported many more adverse consequences of their use in the past 12 months than regular school students. The average number of consequences of use reported by adolescents in alternative education centers who used during the past year was 4.5 compared with 2.5 for the adolescents in regular schools.

Almost half of the substance-using adolescents in alternative education centers reported indications of impaired control over

substance use: spending an entire day using or recovering from the effects of use, using more than intended, and memory blackouts. In addition, almost half reported driving after use. The symptom profile among adolescents in alternative education centers suggests that many substance users in this setting may need assessments and possibly treatment for substance abuse or dependence. In fact, 19% of students in alternative education centers reported past treatment for alcohol or drug problems. However, of those who reported past substance abuse treatment, over half of them reported drinking five or more drinks at least once in the two weeks prior to the survey.

Substance use consequences associated with past 12 month use



In 1996, more alternative education center sites participated in the Minnesota Student Survey than in 1991,¹ and the number of adolescents participating was also greater. The high participation rate for the 1996 survey assured that the 1996 sample was representative of the alternative education center population as a whole.

Comparing the results of the 1996 and 1991 alternative education center surveys reveals very consistent results. Reports of family caring, family alcohol problems, family violence, sexual abuse, self-esteem and emotional problems, suicidal and self-injurious behavior, sexual activity, vandalism and fighting, and alcohol and inhalant use were virtually unchanged. The proportion of adolescents of color stayed about the same (23% in 1996 and 26% in 1991). Adolescents in alternative education centers were slightly younger in 1996 with 15% under age 16 compared with 12% in 1991.

Compared with 1991, more adolescents in alternative education centers in 1996 reported the following: living with a single parent, parental substance use problems, family drug problems, and shoplifting. While the prevalence of alcohol and inhalant use among these students remained about the same for the two survey years, the prevalence of marijuana, cocaine, and amphetamine use increased in 1996, mirroring trends seen among adolescents in Minnesota and throughout the United States.²⁻⁴

To establish a context for evaluating the level of problems among adolescents in alternative education centers, each 1996 alternative education center survey participant was matched with a regular public school student of the same gender and age who participated in the statewide 1995 survey. The comparisons revealed that the 1996 alternative education center population differed from the regular student population on many dimensions:

- Students in alternative education centers were three times as likely as students in regular schools to report that they believe all their teachers are interested in them as individuals and twice as likely to report that all teachers show respect for students.
- Alternative education centers included a disproportionate number of adolescents of color and adolescents from single-parent homes.
- Familial substance abuse rates were 2 times higher for adolescents in alternative education centers than for adolescents in regular schools.
- Adolescents in alternative education centers were twice as likely as adolescents in regular schools to have been physically abused or to have witnessed abuse within their families.
- Females in alternative education centers were twice as likely to have a history of being a victim of sexual abuse as females in regular schools.
- Date rape and date violence were reported much more often by females in alternative education centers than females in regular schools.
- Twice as many students in alternative education centers as students in regular schools reported a suicide attempt.

Summary of findings

- The rate of sexual activity was almost twice as high among adolescents in alternative education centers as among adolescents in regular schools. Two out of five females in alternative education centers had been pregnant and one out of five males had gotten a sexual partner pregnant.
- Antisocial behaviors such as physical assaults, shoplifting, and vandalism were more common among adolescents in alternative education centers than adolescents in regular schools. Approximately twice as many students in alternative education centers reported spending time in a gang compared with students in regular schools.
- Substance use was extremely common among the alternative education center population. Adolescents in alternative education centers were 5 times more likely than regular school students to smoke at least a pack of cigarettes a day, and 2 to 7 times more likely to use drugs other than alcohol. Adolescents in alternative education centers were almost 5 times more likely than regular school adolescents to use at least 3 drugs. Consequences of substance use were reported by a fairly large proportion of adolescents in alternative education centers. Almost half of the adolescents in alternative education centers reported memory blackouts, using more than intended, drinking and driving, and spending all day using or recovering from use.

The alternative education centers appear to be a positive experience for many students who leave the regular school system and enroll in area learning centers or alternative schools. The positive assessments of the alternative education center experience are especially meaningful in light of the reality that this student population includes many students considered to be at risk for a variety of problems, many who have had serious problems, and many who were not successful in the regular school environment. A variety of circumstances other than poor academic performance serve as the catalyst for enrollment in alternative education centers. The higher rates of pregnancy, substance use, and physical or sexual abuse among adolescents in alternative education centers than among adolescents in regular schools are consistent with the eligibility criteria for enrollment in these centers. These risk behaviors and traumatic experiences also highlight the special needs of these students.

The profile of adolescents in alternative education centers depicts the constellation of family and environmental risk factors, and problem behaviors or psychological distress among adolescents. Family risk factors included violence, sexual abuse, and parental substance abuse. Environmental risk factors included sexual abuse outside the home, date rape, and date violence. Adolescent problem behavior included substance abuse and other antisocial or violent behavior, high-risk sexual behavior, deliberate self-injury, and suicide attempts.

Family risk factors were often interrelated, with many adolescents reporting more than one of these risk factors. The same was true of environmental risk factors. Adolescents' risk behaviors were also associated with one another and with psychological distress, meaning that any particular behavioral or psychological problem was associated with an increased likelihood of other problems. The family and environmental risk factors were also significantly associated with the adolescent's behavioral and psychological problems.

The meaningful relationships between risk factors and adolescent problems found in the survey of the alternative education center population are not only consistent with earlier

survey findings of adolescents in public schools,⁶⁻⁸ they are also consistent with clinical research and other epidemiological studies. Family factors have been consistently implicated in adolescent delinquency, substance abuse, and mental health problems.⁹⁻¹¹ Poor parent-child relationships, neglect, lack of warmth and affection, and inconsistent discipline have been found to be related to low self-esteem, depression, and substance abuse among adolescents.¹²⁻¹⁵

Childhood sexual abuse has been consistently found to be associated with low self-esteem, anxiety and depression, self-injury, and suicide attempts.¹⁶⁻²² Sexual abuse leads to overt behavioral problems as well, including truancy and other school problems, delinquency, running away, prostitution, and substance abuse.^{11,19, 22-25} Childhood physical abuse is similarly associated with a range of negative effects including aggressive and violent behavior, low self-esteem, difficulty in establishing relationships, self-destructive behaviors, and psychiatric illness.^{11,19,26} Witnessing family violence may have similar negative outcomes.²⁷

The relationships among the variety of risk factors and problem behaviors examined in the survey of alternative education centers are complex. For example, sexual and physical abuse can lead to repeated victimization when young people who run away from abuse at home become vulnerable to more abuse on the streets. Adolescents may use alcohol and other drugs in an attempt to alleviate the distress associated with abusive experiences, but substance abuse often worsens feelings of depression and anxiety, and is associated with suicide attempts among adolescents.^{8,24} Sometimes substance abuse is an attempt to deal with social alienation, but substance abuse may exacerbate the very problem it is intended to solve when it further disrupts family relationships and friendships.

The fact that so many adolescent problems are interrelated and the reality that many are associated with family problems suggests that solutions will require concerted and collaborative efforts. Many at-risk adolescents emerge from a social milieu replete with violence and despair. Individual families and society as a whole must make a renewed commitment to children. Young people need to be reared in an environment where they are protected, respected, and valued, in order that they learn to value themselves, respect their needs and the needs of others, and adopt healthy and responsible behaviors.⁷

Previous research has identified certain aspects of interventions and treatment programs which are effective with high-risk youth. Successful programs include comprehensive assessments which address substance abuse as well as other behavioral problems and environmental risk factors. Short-term and long-term success has been demonstrated by programs which are tailored to the individual and incorporate therapy or other strategies directed toward solving multiple problems.²⁸ Substance abuse prevention also may be successfully implemented by teachers who have good rapport with their students. In fact, positive interpersonal relations between students and teachers may be more important in substance use prevention than teachers' presentation of facts about substance abuse.²⁹ Peer-led intervention programs have also been found to be effective in the reduction of cigarette smoking.³⁰ Courses in interpersonal relations have been found to significantly reduce school dropout rates, and improve school attendance and academic achievement.³¹

Recommendations

The results of the Minnesota Student Survey of adolescents in alternative education centers have implications for further curricula development and interventions with individual students. Clearly, earlier detection and effective interventions for children and families traumatized by physical and sexual abuse are essential. Improved access to professional assessments and services for all families, without limits imposed by financial resources, also would help to reduce the likelihood of serious behavioral problems and poor school performance among youth. Collaborative efforts now underway between schools, county social service agencies, and community mental health centers, such as targeted service programs, are important steps in this direction.

Survey results also suggest improvements to services for adolescents in the alternative education center system which may reduce substance use problems, pregnancy, and psychological distress. Specific recommendations include:

- Alternative education centers should have an established referral network for assessment and treatment of problems such as substance abuse and physical and sexual abuse.
- Training should be available for alternative education center personnel to ensure that they are readily able to identify mental health and chemical health problems in their students. Referrals for mental health and substance abuse services should be available for students in need.
- Collaborative efforts between alternative education centers, county social service agencies, mental health centers, and substance abuse treatment centers should be expanded to best serve students' needs.
- Programs serving adolescents in alternative education centers should capitalize on the positive relations between teachers and students.
- Curriculum to address responsible sexual behavior should be developed or improved.

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Toll Free: 800-799-3742

FAX: 301-953-0263

e-mail: ericfac@inet.ed.gov

WWW: <http://ericfac.piccard.csc.com>